[redacted] STA

1 April 1968

IBM Corporation
1111 Connecticut Avenue, N.W.
Washington, D.C. 20036

STAT Attention: [redacted]

Gentlemen:

Per discussions over the past month, we are aware of some of the advanced developments of your company in digital processing research aimed at scientific applications. Some of the limitations of present equipment are the following:

a. Narrow bandwidths for scientific applications; hardware algorthmic processors;

b. Large amounts of costly supervisory and control programming overhead; and

c. General security implications of the hardware/software complex and the design trade offs involved.

The third-generation, time shared machines feature considerable disadvantages except for those types of application problems which exhibit a low-duty-cycle, are repetitive or are readily sterilized. For future planning and assessment (next generation hardware) purposes, it would be desirable to gain a better understanding of the set of problems which are foreseen by your company to be major effort areas.

The medium for this is proposed to be a three-hour seminar to be held here in early May of this year or later at the convenience of your people. A presentation of the type that [redacted] has given STA

at IBM, Poughkeepsie, New York, on the 360 design is felt to be most relevant. This discusses the philosophy of new generation design requirements, structuring of registers, memory, interrupt queuing, gradients of memory access time etc. Parallel design considerations are found in hardware/software/applications interfacing.

Sincerely yours,

[redacted] ST

STAT [redacted]

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